

Fig. 1

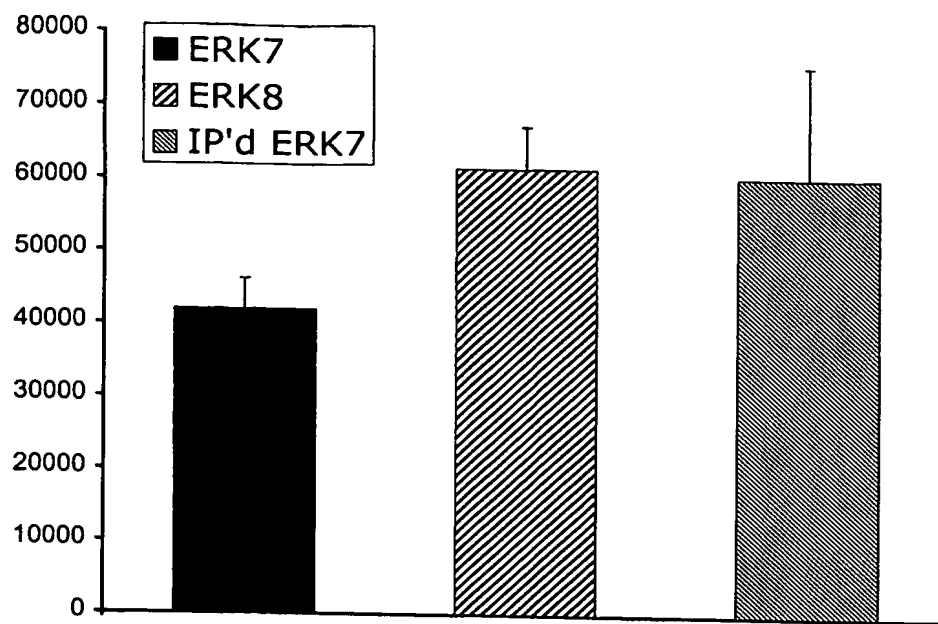


Fig. 2

Fig. 3

Rat ERK7	MCAA	EVDRHVSQRYLIKRR	LGK	GAY	VW	KAM	DRRTGE	VVA	IKK	IFDA	FRDQ	TD	AQ	RT	60
Mouse ERK7	MCAA	EVDRHVAQRYLIKRR	LGK	GAY	VW	KAM	DRRTGE	VVA	IKK	IFDA	FRDQ	TD	AQ	RT	60
Human ERK8	MCT-VVD	PRIVRRYLLRR	Q	LG	GAY	VW	KAVDRRTGE	VVA	IKK	IFDA	FRD	KT	DA	Q	59
	***	**	:	:	***	:	***	:	***	:	***	:	***	:	***
Rat ERK7	EIMLL	REFG	GH	PN	IIR	LD	VI	PA	KN	DR	DI	YLV	FE	SM	120
Mouse ERK7	EIMLL	KEFG	GH	PN	IIR	LD	VI	PA	KN	DR	DI	YLV	FE	SM	120
Human ERK8	EITLL	QEF	G	D	HP	NI	IS	LD	VI	RA	EN	DR	DI	YLV	119
	**	***	.	***	.	***	.	***	.	***	.	***	.	***	.
Rat ERK7	QLLR	ATK	FI	HS	GR	VI	HR	DQ	KP	AN	VLL	DA	AC	RV	180
Mouse ERK7	QLLR	ATK	FI	HS	GR	VI	HR	DQ	KP	AN	VLL	DA	AC	RV	180
Human ERK8	QLLR	AT	RF	L	SH	G	V	VR	DQ	KP	SN	VLL	DA	NC	179
	*****	:	***	:	***	:	***	:	***	:	***	:	***	:	***
Rat ERK7	TRWY	RA	PE	V	LL	SS	R	W	Y	T	P	G	V	D	240
Mouse ERK7	TRWY	RA	PE	V	LL	SS	R	W	Y	T	P	G	V	D	240
Human ERK8	TRWY	RA	PE	V	LL	SS	R	Y	T	L	G	V	D	M	239
	*****	:	***	:	***	:	***	:	***	:	***	:	***	:	***
Rat ERK7	EELQ	LG	S	D	Y	S	A	L	I	Q	N	L	G	S	300
Mouse ERK7	EELQ	LG	S	D	Y	S	A	L	I	Q	N	L	G	S	300
Human ERK8	EDLL	AL	G	S	G	C	R	A	S	V	L	H	Q	L	299
	**	:	***	:	***	:	***	:	***	:	***	:	***	:	***
Rat ERK7	QHPY	VQ	R	F	H	C	P	D	R	E	W	T	R	G	359
Mouse ERK7	QHPY	VQ	R	F	H	C	P	D	R	E	W	A	R	E	359
Human ERK8	QHPY	VQ	R	F	H	C	P	S	D	E	W	A	R	E	359
	*****	:	***	:	***	:	***	:	***	:	***	:	***	:	***

Fig. 3 (continued)

Rat ERK7	GVVASRAELRAS--QRQSLKPGVLQVLAETPARKRGPKPQNGHGHDPHEVE-----V	410
Mouse ERK7	GVVASRAELRASPARTQSLKSGVLQVPAETPARKRGPKPQNGHGHDPHEVE-----V	412
Human ERK8	GVSPSQAHLHKP-----RADPQLPSRTFVQGPRPRQSSPGHDPAEHESPRAAKNV	410
	** .*:.*: . . **: :.***: *: *: . :. . *	
Rat ERK7	RRQSSDPLYQLPPPGSGERPPGATGEPSPAPSGVKTQVRAVAPSLTSQAAQAANQPLIR	470
Mouse ERK7	RRQSSDPLFLQLPPPGSGERPPGATGQPPSAPSGVKTQVRAMAPSLTSQAEQAANQALIR	472
Human ERK8	PRQNSAPLLQTALLNGGERPPGAKAPLTLVLKPSGRGAAPSLTSQAAQAQVANQALIR	470
	.* ** * . * ***. ** : * **. *. ***** **.* ** *	
Rat ERK7	SDPARGGGPRAVGARRVPSRLPREAPEPRPGRRMFGISVSQGAQAARAALGGYSQAYGT	530
Mouse ERK7	SDPARGGGPRAVGARRVPSRLPREAPEPRPGRRMFGISVSQGAQAARAALGGYSQAYGT	532
Human ERK8	GDWNRGGGVRVASVQVPPRLP---PEARPGRRMFSTALQGAQGGARALLGGYSQAYGT	527
	. * **** *.....:*** **.* *****. *. *****. *** *****	
Rat ERK7	VCRSALGRLPLLPGPRA	547
Mouse ERK7	VCRSALGRLPLLPGPRA	549
Human ERK8	VCHSALGHLPLLEGHV	544
	.:**.* ** *	

CLUSTAL W (1.82) Multiple Sequence Alignments

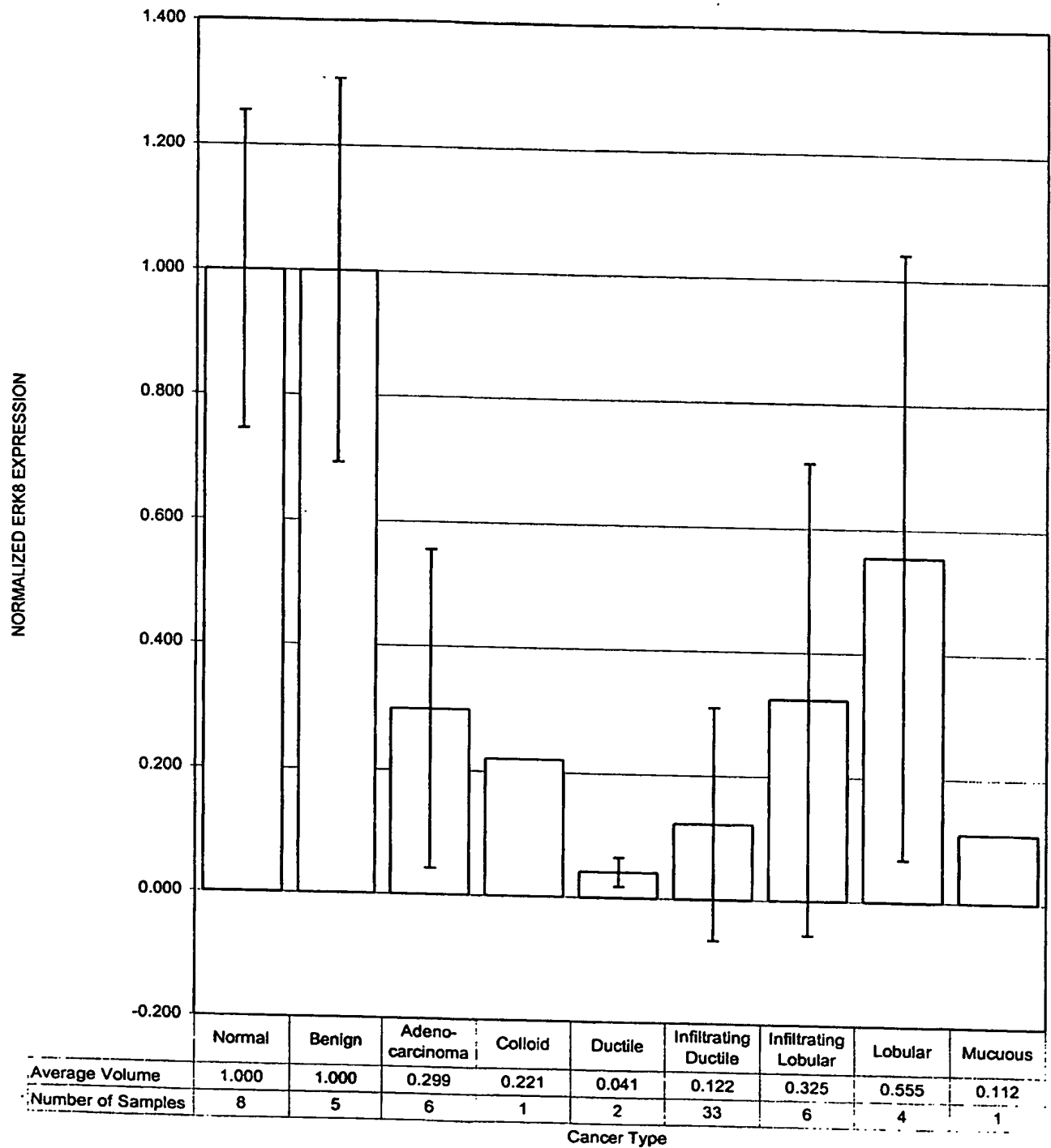
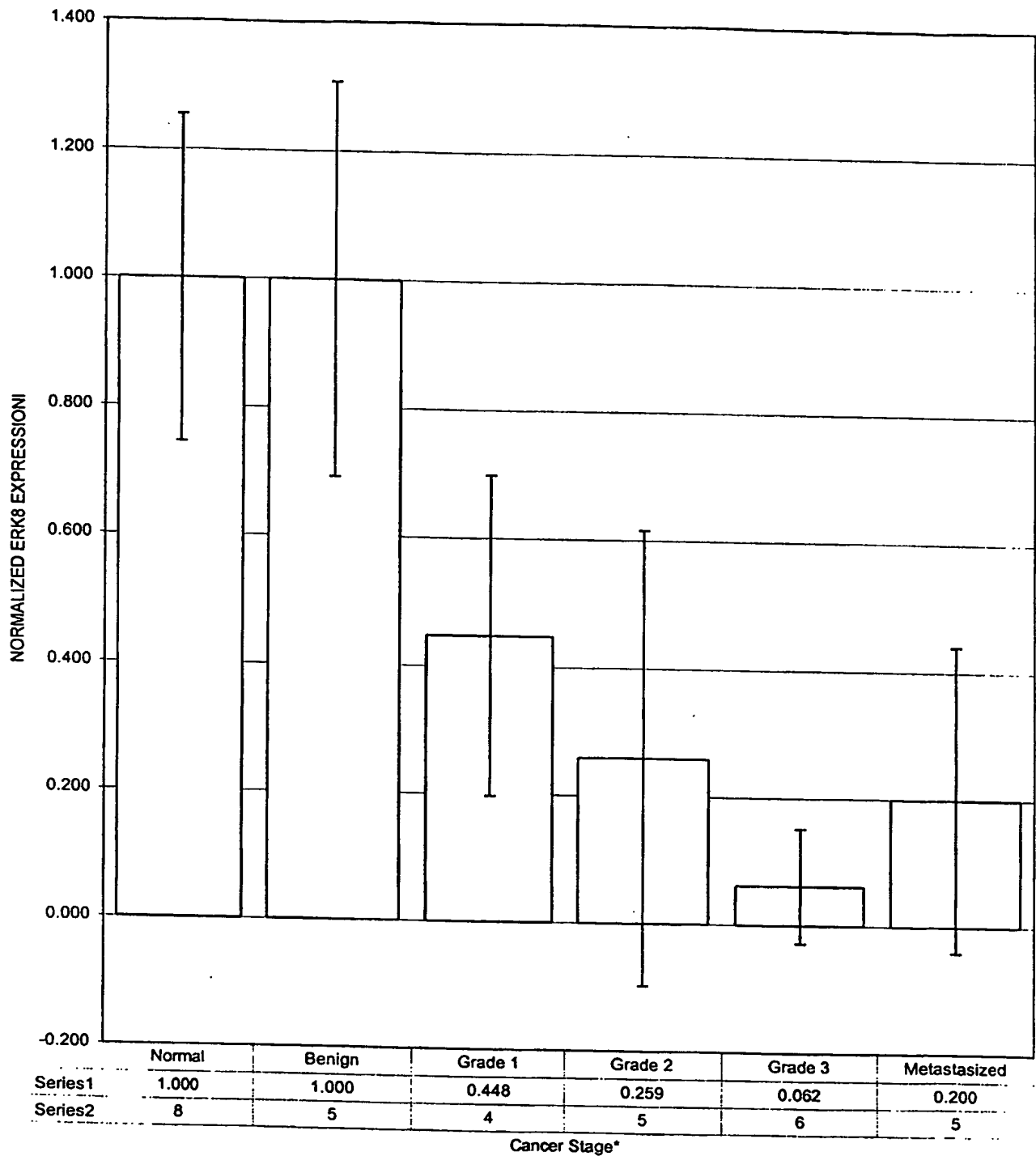
Fig. 4 **Erk8 Expression in Different Breast Cancers**

Fig. 5 Erk8 Expression in Breast Cancers of Different Grades

*Cancer Types: Adenocarcinoma, Colloid, Infiltrating Ductal, Infiltrating Lobular, & Lobular

Fig. 6

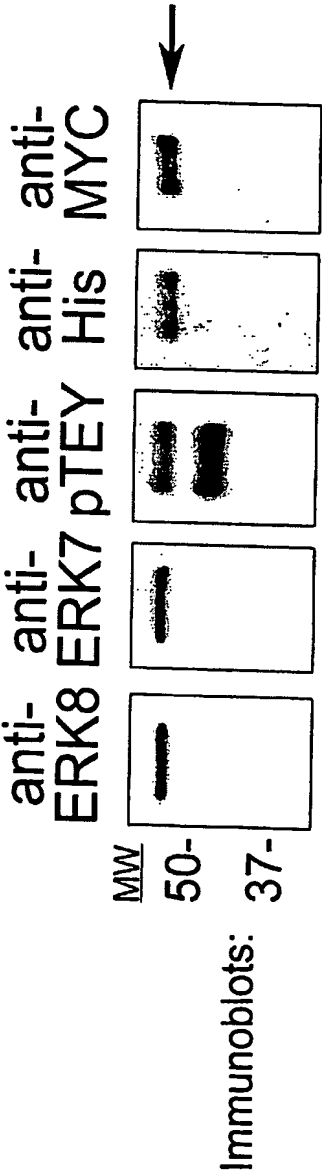


Fig. 7

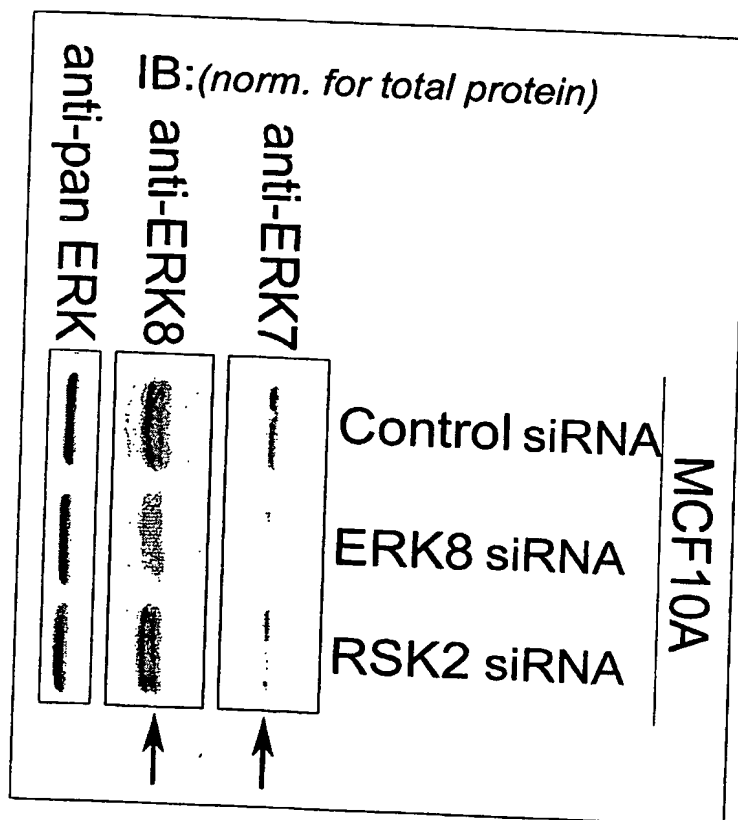


Fig. 8

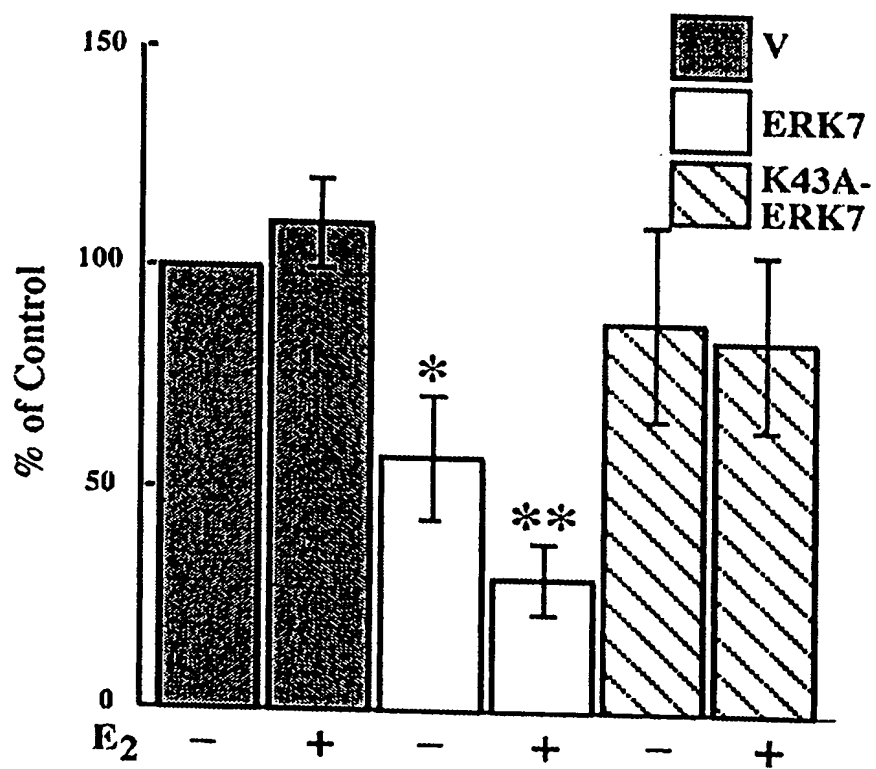


Fig. 9A

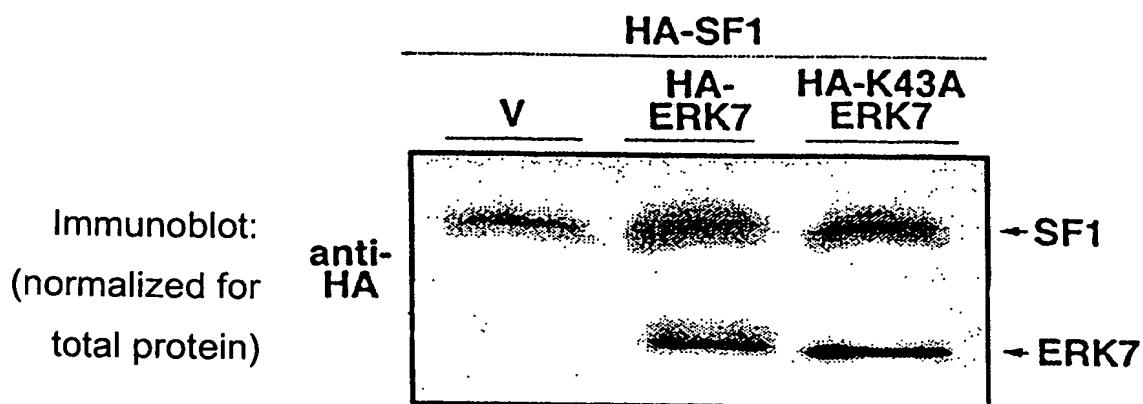


Fig. 9B

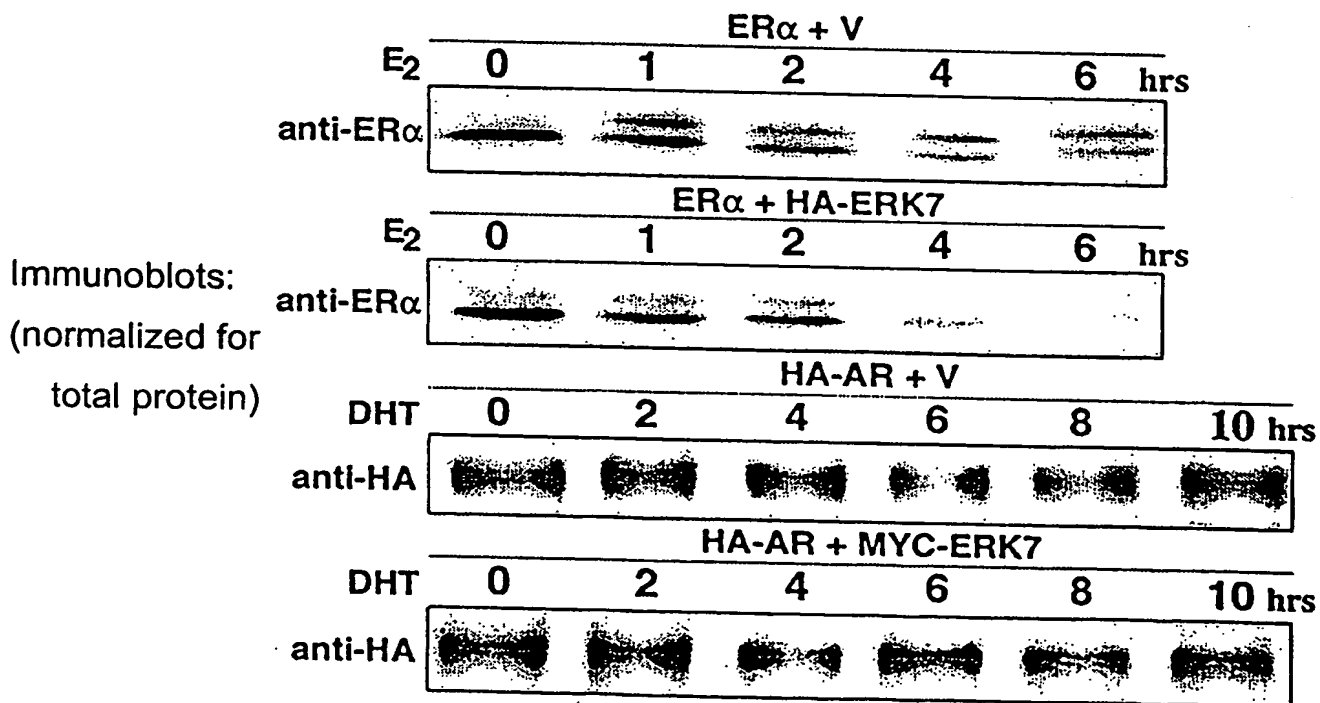


Fig. 10A

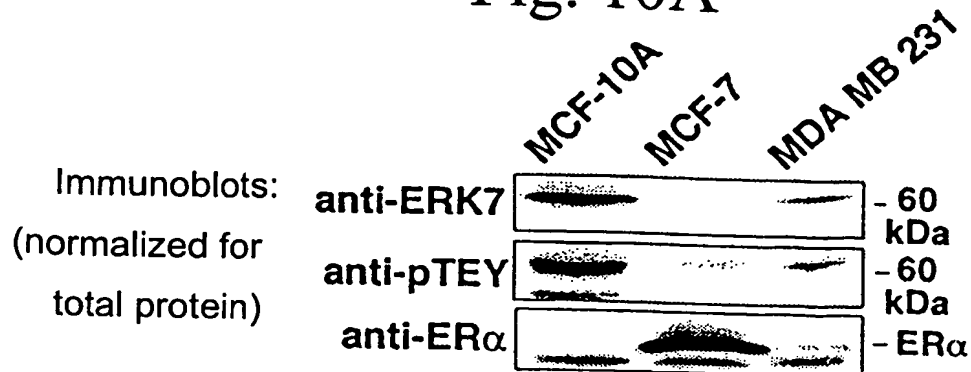


Fig. 10B

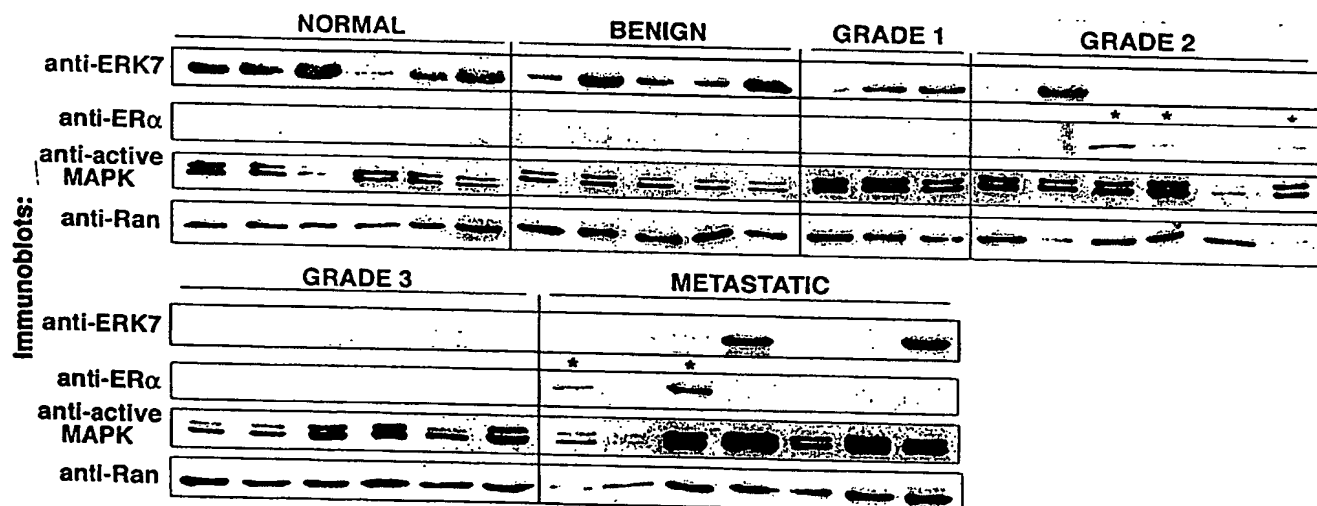


Fig. 11

